

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Plant Abstract

Element Code: PDSCR1L4Z0

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Penstemon petiolatus* Brandegee

COMMON NAME: Sheep range beardtongue, Petiolate beardtongue, Lime penstemon, Crevice penstemon

SYNONYMS: *Penstemon calcareous* M.E. Jones

FAMILY: Scrophulariaceae

AUTHOR, PLACE OF PUBLICATION: Brandegee, Botanical Gazette 27(6): 455. 1899.

TYPE LOCALITY: Sheep Mountain, Nevada, USA; alt. 5000 ft. 1524 m.

TYPE SPECIMEN: HT: UC. C.A. Purpus 6136, May 1898. IT: GH, NY, US.

TAXONOMIC UNIQUENESS: Species *petiolatus* is 1 of 247 species in the genus *Penstemon*, and 1 of 43 in Arizona.

DESCRIPTION: Low rounded shrub, covered with a fine waxy powder, 5-15(-40) cm [2-6(-16) in] tall and up to 60 cm (24 in) across. Shrub at first green to blue-glaucous, puberulent, eventually becoming trunk-like, gnarled, and blackish near the base. Stems branching, with thick holly-like basal leaves, 7-40 mm long. The dentate leaves 2-3 cm () long, 8-17 mm wide, broadly ovate, obtuse or acute, all but the uppermost petiolate; thyrses short and broad with divergent peduncles. The cymes are (1)2- to 4(5)-flowered, glandular-pubescent; calyx is 4-7(8) mm long, the segments narrowly lanceolate to lanceolate, glandular-pubescent, and the margins narrowly scarious. The corolla is 13-17 mm long, moderately ampliate, the lobes spreading, magenta with dark violet lines inside the throat, glandular-pubescent externally, the palate bearded with whitish-yellow hairs; staminode slightly exserted, with short yellow hairs nearly the full length. The fertile stamens included to slightly exserted, the anther-cells 0.5-0.9 mm long, dehiscing the full length and becoming peltately explanate; capsule about 6-8 mm long. (Cronquist et al. 1984; Falk et al. 2001).

AIDS TO IDENTIFICATION:

ILLUSTRATIONS: Line drawing (Cronquist et al. 1984: p. 427)

Line drawing (Falk et al. 2001).

Color photos of plant and habitat (Falk et al. 2001).

Color photo of Isotype specimen (NY-130474, in

<http://207.156.243.8/emu/vh/specimen.php?irn=315342>)

Color photo of Isotype specimen (US-348204, in

<http://ravenel.si.edu/botany/types/fullRecords.cfm?myFamily=>)

Color photos (James L. Reveal, *in* Norton-Brown Herbarium Images,
<http://www.life.umd.edu/emeritus/reveal/PBIO/slides/slides500-699.html>)

Color photo of Herbarium Collection (ASU-90811, *in* SEINet at
<http://seinet.asu.edu/collection/TaxaDetails.jsp>)

TOTAL RANGE: Known from an area near the intersection of the Nevada, Utah, and Arizona state borders.

RANGE WITHIN ARIZONA: Virgin and Beaver Dam Mountains, Mohave County.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial shrub/subshrub.

PHENOLOGY: Flowers in May; fruits in May and June.

BIOLOGY:

HABITAT: Found on limestone cliffs (in crevices), ledges, and boulders.

ELEVATION: 2,000-5,800 ft (610-1770 m). In Arizona, found at 2,000 ft (610 m).

EXPOSURE: East and northeast exposures in Arizona.

SUBSTRATE: Limestone rock crevices.

PLANT COMMUNITY: Eastern Mohave Desert endemic. Through its range, this species can be found in Joshua tree, blackbrush, creosote bush, indigo bush, and pinyon-juniper communities. In Nevada, this species is found to associate with *Aristida* (three-awn grass), *Atriplex confertifolia* (shadscale), *Brickellia microphylla* (little-leaved Brickell-bush), *Buddleja utahensis* (Utah butterfly-bush), *Gutierrezia* (snakeweed), and *Stipa speciosa* (desert needlegrass).

POPULATION HISTORY AND TRENDS: A rare plant with few threats due to its inaccessible habitat (Falk et al. 2001). Locally common within its limited distribution.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None

STATE STATUS: None

OTHER STATUS: Bureau of Land Management Sensitive

(USDI, BLM AZ 2000, 2005)

MANAGEMENT FACTORS:**PROTECTIVE MEASURES TAKEN:****SUGGESTED PROJECTS:**

LAND MANAGEMENT/OWNERSHIP: BLM – Arizona Strip Field Office, Virgin River ACEC; Private.

SOURCES OF FURTHER INFORMATION**REFERENCES:**

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MAJOR KNOWLEDGEABLE INDIVIDUALS:

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ADDITIONAL INFORMATION:

Revised: 2002-05-23 (SMS)
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